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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,748	06/15/2001	Timothy T. Crane		9831

27804 7590 05/20/2004  
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EXAMINER

LEE, BENJAMIN C

ART UNIT PAPER NUMBER

2632

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/882,748

**Applicant(s)**

CRANE ET AL.

**Examiner**

Benjamin C. Lee

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Claim Status

1. **Claims 1-30** are pending.

#### *Claim Rejections - 35 USC § 112*

2. Claims 1-30 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) In claims 1-30, it is unclear whether the term “metal/magnetic” includes “either metal or magnetic” as the “/” is conventionally used to mean, or “both metal and magnetic” as the specification seems to suggest.

#### Note

3. Claims 1-30 include the term “optionally”. As such, when interpreting the claims, the limitations following that term need not be included in the claimed invention, and the claim rejections in the following sections have interpreted the claims accordingly.

#### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-8, 10-12 and 24-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule et al. (US pat. #5,803,503) in view of Dames et al. (US pat. #5,697,649).

1) In considering claim 1:

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a) Kaule et al. discloses a metal/magnetic security device comprising: a carrier substrate (2) having a length; and security detection features disposed on at least one surface of the carrier substrate (Figs. 1-3), wherein the security detection features comprise: a repeating pattern of discrete metal/magnetic indicia (repeating pattern of Fig. 2 of indicia that are discrete in that they do not overlap; negative indicia formed by recesses 5 of Fig. 2 wherein the negative indicia is in the form of metal/magnetic indicia formed by metal layers 3, 11 sandwiching magnetic layer 4 in Fig. 6);

except:

b) the claimed discrete metal or metal-dot formed indicia.

Kaule et al. teaches the use of combination of metal and magnetic security detection features (3, 4 in Figs. 2 and 3) using discrete magnetic regions 4 and metal/magnetic regions 3 forming negative indicia to represent a repeating pattern on the carrier substrate.

Dames et al. teaches a similar repeating pattern of metal and magnetic security features using a combination of negative (24a-24c) and positive (20) metal formed indicia in addition to magnetic security features for added security (Fig. 2).

In view of the teachings by Kaule et al. and Dames et al., since Kaule et al. teaches that combination of multiple security features provides improved security, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that adding discrete metal formed positive and/or negative indicia such as taught by Dames et al. to the multiple-security featured security device such as taught by Kaule et al. improves overall security by virtue of the additional security features.

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2) In considering claim 2, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 1, including:

--the claimed transparent carrier film (10 of Kaule et al.).

3) In considering claim 3, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 1, including:

--the claimed said discrete metal/magnetic indicia comprise at least one of geometric shapes, letters, numbers, alphanumeric characters and symbols (Figs. 2-3 of Kaule et al.).

4) In considering claim 4, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 1, including:

--the claimed wherein the discrete metal or metal-dot formed indicia comprise at least one of letters, numbers, alphanumeric characters, symbols and metal or metal-dot regions which surround and define clear indicia (20 and 24a-24c of Dames).

5) In considering claim 5, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 1, including:

--the claimed wherein the discrete metal/magnetic indicia and the discrete metal or metal-dot formed indicia form a repeating pattern extending along the length of at least one surface of the carrier substrate (Figs. 2-3 & 6 of Kaule et al. and Figs. 1-2 of Dames).

6) In considering claim 6, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 1, except:

--the claimed wherein the security detection features further comprise at least one metal strip extending along the length of at least one surface of the carrier substrate.

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Kaule et al. teaches the use of combination of metal and magnetic security detection features (3, 4 in Figs. 2 and 3) whereby two magnetic strips 4 can extend along the length of the carrier substrate as one of the security features. Dames teaches that one of the combination security features (second) can be of magnetic and/or non-magnetic form as alternatives (col. 4, lines 25-42). Since combination of metal and magnetic security detection features are used by Kaule et al. and Dames for added security, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to run two metal strips, instead of magnetic strips, extending along the length of the carrier in combination with the metal/magnetic features in a security device such as taught by Kaule et al. and Dames as another combination alternative that is within the scope of the combined teaching.

7) In considering claim 7, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 6, including:

--the claimed wherein at least a portion of at least one metal/magnetic indicia overlaps at least a portion of at least one metal strip (configuration of Fig. 3 of Kaule et al.).

8) In considering claim 8, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 6, including:

--the claimed wherein the security detection features further comprise a first and a second metal strip extending longitudinally along a top and a bottom region of at least one surface of the carrier substrate (configuration of Fig. 3 of Kaule et al.).

9) In considering claims 10-11, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 1, including:

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--the claimed wherein the metal/magnetic indicia are multi-layer, metal/magnetic indicia which include a metal layer (11 in Fig. 6 of Kaule et al.) disposed on the carrier substrate (10 in Fig. 6 of Kaule et al.), and a magnetic layer (5 in Fig. 6 of Kaule et al.) disposed on the metal layer, and include a second metal layer (3 in Fig. 6 of Kaule et al.) disposed on the magnetic layer.

10) In considering claim 12, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 1, including:

--the claimed said discrete metal or metal-dot formed indicia are formed by solid metal (20 and 24a-24c of Dames).

11) In considering claim 24, Kaule et al. and Dames made obvious all of the claimed subject matter as in the consideration of claim 1.

12) In considering claim 25, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 24, plus the consideration of claim 2.

13) In considering claim 26, Kaule et al. and Dames et al. made obvious all of the claimed subject matter as in claim 24, including:

--the claimed said discrete metal/magnetic indicia and discrete metal or metal-dot formed indicia form a repeating pattern extending along the length of the carrier substrate (Figs. 2-3 of Kaule et al. and Figs. 1-2 of Dames et al.).

14) In considering claims 27-28, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 24, plus the consideration of claims 10-11.

15) In considering claim 29, Kaule et al. and Dames made obvious all of the claimed subject matter as in claim 24, plus the consideration of claim 12.

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6. **Claims 9, 13 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule et al. in view of Dames et al. and Schmitz et al. (US pat. #5,573,639).

1) In considering claim 9, Kaule et al. and Dames et al. made obvious all of the claimed subject matter as in claim 1, except:

--the claimed wherein the security detection features further comprise a plurality of metal dots located on remaining metal-free regions of at least one surface of the carrier substrate.

Schmitz et al. teaches the use of metal dots located on remaining metal-free regions of a surface of the carrier substrate as one security feature of the security device (Figs. 2, 5 and col. 3, lines 45-52).

In view of the teachings by Kaule et al., Dames et al. and Schmitz et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that inclusion of the metal dots security feature such as taught by Schmitz et al. in a combination security featured security device such as taught by Kaule et al. and Dames et al. improves security by virtue of the addition of the metal dots security feature.

2) In considering claim 13, Kaule et al. and Dames et al. made obvious all of the claimed subject matter as in claim 1, except:

--the claimed said discrete metal or metal-dot formed indicia are formed by a plurality of closely spaced metal dots.

Schmitz et al. teaches the use of metal dots located on a surface of the carrier substrate as one security feature of the security device (Figs. 2, 5 and col. 3, lines 45-52).

In view of the teachings by Kaule et al., Dames et al. and Schmitz et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the metal



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or metal-dot formed indicia in a combination security device such as taught by Kaule et al. and Dames can be implemented using metal dots such as taught by Schmitz et al. as a known way of implementing a metallic security feature.

3) In considering claim 30, Kaule et al. and Dames et al. made obvious all of the claimed subject matter as in claim 24, plus the consideration of claim 13 further in view of Schmitz et al.

7. **Claims 14-18 and 20-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule et al. in view of Dames et al. and Fosbenner et al. (US pat #5,949,050).

1) In considering claim 14, Kaule et al. and Dames et al. made obvious all of the claimed subject matter as in the consideration of claims 4 and 6, except:

--specifying the claimed said discrete metal/magnetic indicia are in the form of geometric shapes.

However, Kaule et al. discloses that the indicia can be in the form of any characters, numbers or patterns, etc. (col. 3, lines 41-46), while Fosbenner et al. discloses geometric shapes as a specific form of security indicia (stars in Fig. 6).

In view of the teachings by Kaule et al., Dames et al. and Fosbenner et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that geometric shapes such as taught by Fosbenner et al. can used as a specific form of the metal/magnetic indicia in a multiple security feature security device such as taught by Kaule et al. and Dames et al. as a choice of the physical appearance to be taken by the metal/magnetic indicia without unexpected results.

2) In considering claim 15, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 2.

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3) In considering claim 16, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 5.

4) In considering claim 17, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 7.

5) In considering claim 18, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 8.

6) In considering claims 20-21, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claims 10-11.

7) In considering claim 22, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 12.

8. **Claims 19 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule et al. in view of Dames et al., Fosbenner et al. and Schmitz et al.

1) In considering claim 19, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 9 further in view of Schmitz et al.

2) In considering claim 23, Kaule et al., Dames et al. and Fosbenner et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 13 further in view of Schmitz et al.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

--US Pat. Nos. 5044707, 5844230, 6692031, 5492370, 6454166

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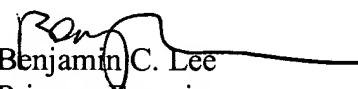
Similar security features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (703) 306-4223.

The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Benjamin C. Lee  
Primary Examiner  
Art Unit 2632

B.L.  
5/13/04